	er ID 114937 17, 2014 2:32:28 PM	7-041	*112	1937*		•			Page 1	
Revision ID:	D3407-041 D 3 4 Tow Ring	14937	Accept	*N900040	1100) * s	Setup Star Stop	147.	S1*	
Start Date: Required Date: Reference:	3/17/14 Start Qty: 10.4 : 3/17/14 Req'd Qty: 10.4			Cust Item ID: Customer:		0.			1	
Approvals:	Process Plan: MLJ QC:	Date: 1403-18	Tooling: _ SPC (Y/N):	Date:	•		Run Star Stop	^IVI F	₹1* ₹2*	
Sequence ID/ Work Center II	Operation Description		Set Up/ Run Hours	Tool ID b Tool #	Plan Code	Accept Qty	Reject Qty		Insp. Stamp	
Draw Nbr	Revision Nbr	•								_
D3407	Rev E		,	•						•
100 *1 ∩ `\^ * Large Fab	Large Fab	. •	0.00		•	10		14-06	-09	MAL
Large Fab		3407-1/-5 using welding rod TI	G174 as per Dwg D3407 102 576	7 & QSI 004				<u> </u>		
¹¹⁰ *11∩*	• , QC9- Inspect visual	per QSI004- Fusion Welds	0.00	•		. ((0)	14-(Jr.08	DAS 9	
QC Quality Control	Memo	Pr.	0.00	•				•	S-89	•
120	QC5- Inspect part c	ompleteness to step on W/O	0.00		•		•	•	DAS	•
120 QC	,Memo	✓	0.00			. (10)	14-8	2000	9 9-89	•

DQA:		_ Date:							· ·	•			TART
QA Closed:		Date:			WORK ORDER NON	-C(ONFO	RMANCE / U	IPDATE .	W	ork Order u	odate only	AEROSPACE
Work Orde	ar:	· · · · · · · · · · · · · · · · · · ·			DISPOSITION				AGAINST		PARTMENT		
Part N					Rework Scrap			Skid-tube Machining	Crosstube Small Fab	_	Pro	Water Jet d. Eng. Coor.	Engineering Quality
NCR N	lo		·		Use-as-is Suspected Unapproved			noforming Large Fab	Finishing Composite		1	re/Packaging Supplier	Other
Root				Desci	ription of work order update		Initial		tion		Sign &		
Cause	Date	Step	Qty	<u> </u>	or non-conformance	Ch	nief Eng	Desc	ription		Date	Verification	QC Inspector
Design	_											:	
Doc/Data												,	
Equip/Tooling													
Handling/Pre													
Material													
Operator	_												
Offset/Setup								•	o				
Process	_	,			·						a.		
Supplier													·
Training	_												
Fransport	_												
Jnapproved		1			•	<u> </u>			·				
					······································	FAI	ULT CAT	EGORY					
Landin F	g Gear				General		1	•			7		, ·
-	Bending	_			Bend	<u> </u>	4	rogram			Outside Dim	⊢	Pressure/Forced
		ot Conce	ntric		BOM/Route	<u> </u>	Grain				Over/Under		Set-up
	Cracks		4		Broken/Damage/Defect	<u> </u>	Hardwa				Part Incorred	├ ──	Temperature/Cure
	_	nk/Ripple	/Wave	-	Burrs	<u> </u>	1	on incomplete/U	-		Part Lost/Mi	<u> </u>	Weld
·	Cuffs			_	Contamination	-	4	ions Incomplete/I	Unclear		Part Moved		Wrong Stock Pulled
	Crushing			\vdash	Countersink	<u> </u>	4	ned/off center			Positioned W	· ·	7
	Heat Tre			<u> </u>	Cut Too Short		Mislabe				Power Loss/	Surge	Other
-	Inspection	•	Tube		Drawing	<u> </u>	Misread	i					
	Marks/Cl				Drill Holes	<u> </u>	Off-set	•					
	Turning S	•			Finish		4	Calibration					
1	Wave/Tv	vist in Tur	10	1	Fit/Function	I	I Out of 9	Coguenco					

Work Ord Monday, March				*112	1937*				Page 2
Item ID: Revision ID:	D3407-041		· · · · · · · · · · · · · · · · · · ·	Accept	*N900040	1100	* Setu	p Start	*NS1*
Item Name:	Tow Ring							Stop	*NS2*
Start Date: Required Date: Reference:	3/17/14 : 3/17/14	Start Qty: 10.00 Req'd Qty: 10.00	*1(*1(_	Cust Item ID: Customer:				14. 17
Approvals:	Process Pla	ın:	Date:	Tooling:	Date:		Run	Start	*NR1*
· ·			Date:	SPC (Y/N):	Date:			Stop	*NR2*
Sequence ID/ Work Center I	D	Operation Description		Set Up/ Run Hours	Tool ID Tool #			leject Ity	Reject Insp. Number Stamp
130		White Gloss(Ref:4.3.5.2)	,	0.00				/	84
120 Powdercoat		M 12800 Memo	7	0.00		1	10 ¢	<u> //</u> 7	1-6-12- 88
Powder Coating		START TIM	IPÉRATURE: 70	DAS					
140		QC3- Inspect Part Finish		0.00 9-89			<i>'</i> 0		
140 oc		Memo		0.00 146	12	-	<u>(C)</u> _		

150

Identify as per dwg & Stock Location: 5T

0.00

150 Packaging

Quality Control

Packaging

Memo

0.00

DAS28
9-89

JUN 1 2 2014

DQA:		Date:										DART
					WORK ORDER NON-	-C(ONFO	RMANCE / UPDATE				AEROSPACE
QA Closed:		Date:				_			W	ork Order u	odate only	
Work Orde	r:				DISPOSITION			AGAINS	T DE	PARTMENT	/PROCESS	
				_	Rework			Skid-tube Crosstub	- [7	Water Jet	Engineering
Part N	0.				Scrap			Machining Small Fal	- 1	Pro	d. Eng. Coor.	Quality
					Use-as-is			moforming Finishin	_	-4	re/Packaging	Other
NCR N	0	 			Suspected Unapproved			Large Fab Composite	e]	Supplier	
Root				Descr	ription of work order update		Initial	Action		Sign &		
Cause	Date	Step	Qty		or non-conformance	Ch	nief Eng	Description		Date	Verification	QC Inspector
Design												
Doc/Data	_											
quip/Tooling	_											
landling/Pre	_											
/laterial	_ \											
Operator	_											
Offset/Setup	_											
rocess	_											
upplier	_											
raining	_											
ransport												
Inapproved				-								
ما المسمال						FAI	ULI CA	TEGORY				
Landin Г	Bending				General Bend		11:-/5	Program		Outside Dim	:	7 ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
-	Centre No	t Cancar	atric	-	BOM/Route	_	Grain	Togram	-	Over/Under		Pressure/Forced Set-up
F	Cracks	it Coricei	ILLIC	\blacksquare	Broken/Damage/Defect		Hardwa	aro.	\vdash	Part Incorred	_	Temperature/Cure
·	· Crimp/Kin	ر المارية المارية	/\ <i>\</i> /2\/0		Burrs		4	ion Incomplete/Unqualified		Part Lost/Mi	· —	Weld
17.	Cuffs	iky itippie	, wave		Contamination	-	1 '	tions Incomplete/Unclear	\vdash	Part Moved	331116	Wrong Stock Pulled
-	Crushing				Countersink		4	gned/off center	-	Positioned V	L_ √rong	
F	Heat Trea	t		———	Cut Too Short		Mislabe		\vdash	Power Loss/		Other
-	Inspection		Tube		Drawing		Misrea		_	J. 5 c. 2335/		1
·	Marks/Ch			H	Drill Holes		Off-set					
	Turning Se			П	Finish		4	Calibration				
	Wave/Tw	-		<u> </u>	Fit/Function		4	Sequence				

Work	Order ID	114937

114937

Page 3

Monday, March 17, 2014 2:32:28 PM D3407-041 Accept Item TD: *N900040100* **Revision ID:** Item Name: Tow Ring *10* **Start Oty: 10.00 Start Date:** 3/17/14 **Cust Item ID:** Required Date: 3/17/14 Rea'd Otv: 10.00 *10* **Customer:** Reference: Tooling: **Approvals:** Process Plan: Date:

Start Run

Stop

Stop

Sequence ID/ Operation **Work Center ID**

QC:

Description

Set Up/ Run Hours Tool ID

Date:

Date:

Tool # Plan Code

Accept Qty

Reject Qty

Setup Start

Reject Insp. Number Stamp

160

QC21- Final Inspection - Work Order Release

Date:

0.00

SPC (Y/N):

160 OC

Memo

0.00

Quality Control

MLJ 14-06-16 H14-6-13

DQA:		_ Date:										TOART
QA Closed:		Date:			WORK ORDER NON-	-C(ONFO	RMANCE / UPDA		/ork Order uj	adate only	AEROSPACE
Q		- Juic.				-	f		•	ork Oraci a	odate only	
Work Orde	r:				DISPOSITION			•	AGAINST D	EPARTMENT	/PROCESS	
					Rework			Skid-tube C	rosstube	7	Water Jet	Engineering
Part No	0.				Scrap			—	Small Fab	Pro	d. Eng. Coor.	Quality
					Use-as-is			· —	Finishing	_	re/Packaging	Other
NCR N	o				Suspected Unapproved			Large Fab Co	omposite		Supplier	
				!				·				
Root		1		Desci	ription of work order update		Initial	Action		Sign &	•	
Cause	Date	Step	Qty		or non-conformance	Ch	rief Eng	Description	on	Date	Verification	QC Inspector
Design	_											
Doc/Data	_	1										
Equip/Tooling												
Handling/Pre	_											
Material	_											
Operator	_											
Offset/Setup	4	İ										
Process												
Supplier	4											
Training												
Transport	_											
Unapproved			<u> </u>							<u>.</u>		
	- 0	-				FAI	ULT CAT	regory				
Landin					General		le-1:- /s	No		7		7. /.
-	Bending	. . C			Bend BOM (Bouts		•	rogram		Outside Dim	_	Pressure/Forced
-	Centre No	ot Concer	itric		BOM/Route		Grain		·	Over/Under		Set-up
-	Cracks	ok/Dinnlo	/\4/00	\vdash	Broken/Damage/Defect		Hardwa		:6:4	Part Incorred	⊢	Temperature/Cure
-	Crimp/Kir	ik/kippie	y vv ave	\vdash	Burrs		1	ion Incomplete/Unqual	<u> </u>	Part Lost/Mi	ssing	Weld
-	Cuffs Crushing			<u> </u>	Contamination Countersink	-	4	ions Incomplete/Uncle gned/off center	ar	Part Moved	L	Wrong Stock Pulled
	Heat Trea			-	Cut Too Short	_	Mislabe		\vdash	Positioned V Power Loss/		Other
_	Inspection		Tube	-	Drawing	_	Misread		L	Trower rossy:	ourge	Other
<u> </u>	Marks/Ch	-	, unc	\vdash	Drill Holes	-	Off-set	<i>A</i>				
-	Turning So				Finish		1	Calibration				
<u> </u>	Wave/Tw	•	e	_	Fit/Function		4	Sequence				
					-			•				

Monday, March 17, 2014 2:32:27 PM

Work Order ID: 114937

114937

Parent Item:

D3407-041

D3407-041

Parent Item Name: Tow Ring

Start Date: 3/17/14

Required Date: 3/17/14

Start Qty: 10.00

Required Qty: 10.00

Comments:

IPP Rev:A05.10.14New issueKJ/EC

IPP Rev:B 08-09-09 revE as per dwg DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status	
D3407-1		Manufactured	No			100	Each	22.0000	1	10				
D3407-1									**					
B113621	×10			Location WA001		Loc	<u>Oty</u> 22	Loc Code	<u>.</u>	10	/4	4-06 -	09	MA
	- •				103869 109128		6 16		_					
D3407-5		Manufactured	No			100	Each	0.0000	1	10				
D3407-5									**					

Ring

B115097 x10

10 14-06-09 MAL

DQA:			Date:			•			_					TOART
QA Closed:			Date:			WORK ORDER NON	-C(ONFO	RMANCE / UPD		Vork Order u	ndate only		AEROSPACE
						DISPOSITION					EPARTMENT			
Work Orde	er: _									AGAINS1 D		/PROCESS		
						Rework			Skid-tube (Crosstube		Water Jet		Engineering
Part N	۷o					Scrap			Machining	Small Fab	Pro	d. Eng. Coor.		Quality
						Use-as-is		Therr	noforming	Finishing	Rec/Sto	re/Packaging		Other
NCR 1	No. –	· · · · ·				Suspected Unapproved			Large Fab C	Composite		Supplier		
Root		**			Desc	ription of work order update	<u> </u>	Initial	Action	1	Sign &	-	Т	
Cause		Date	Step	Qty		or non-conformance	Ch	nief Eng	Descripti	ion	Date	Verificatio	n	QC Inspector
Design	Ш													
Doc/Data	Ш												ľ	
Equip/Tooling	Ц													
Handling/Pre	Ц.													
Material	Ш													
Operator														
Offset/Setup	Щ													
Process	Ш													
Supplier	Ш													
Training	Н												- 1	
Transport	Щ												- 1	
Unapproved							<u></u>		<u> </u>			•	\perp	
							FAL	ULT CAT	TEGORY					
Landi					_	General		1		_	٦		\neg	
	_	Bending			_	Bend BOM/Rauta		1	rogram	-	Outside Dim		_	Pressure/Forced
	-		ot Concer	itric		BOM/Route		Grain		-	Over/Under		-	Set-up
	\vdash	racks	nk/Ripple	Maria	_	Broken/Damage/Defect		Hardwa		ا د عناد	Part Incorred	- 1	-	Temperature/Cure
	-	Cuffs	ik) vihhie,	/ wave		Burrs Contamination		1 '	ion Incomplete/Unquations Incomplete/Uncl		Part Lost/Mi	ssing		Weld
		Crushing				Countersink		4	ned/off center	lear	Part Moved	(*****		Wrong Stock Pulled
	-	i usiling leat Trea	ıt		\vdash	Cut Too Short	-	Mislabe		-	Positioned V Power Loss/		\neg	Other
	-		n Strip in	Tube		Drawing	-	Misread		L	Trower ross/	onige (Ouiei
		/Jarks/Ch	-	, 400		Drill Holes	-	Off-set						
	_		equence		\vdash	Finish		4	Calibration					<u> </u>
	\vdash	-	ist in Tub	e		Fit/Function		1	Sequence		-			
						. · · · · · · · · · · · · · · · · · · ·			•					

QTY -045 QTY -041 QTY -043 PART NUMBER DESCRIPTION TOW RING Х D3407-041 D3407-043 D3407-045 TOW RING D3407-1 STEM D3407-3 STEM D3407-5 RING D3407-7 STEM -D3407-5 RING -D3407-5 RING -D3407-5 RING 8 8 E -D3407-1 STEM 6 -D3407-3 STEM D3407-7 STEM

D3407-041 TOW RING

D3407-043 TOW RING

<u>D3407-045 TOW RING</u> ♠

Ε	ADD D3 REVISE REASOI	407-045 (ZN B2 D NOTE 6 TO A N: PRODUCTION	2-1, D8-1); ADD D3407-7 (ZN B6-5); ADD IDENTIFICATION (ZN A5-1); AN FACILITY	PH	08.07.23
D	D3407-1 WITH D3 FLAT OI B6-4); R	/-3 SLOT WAS 3407-5 (ZN C2- N ONE END FO EASON: PROD	ROUND NOW FLAT FOR ASSEMBLY 2, C2-3); D3407-5 WAS ROUND NOW R ASSEMBLY WITH D3407-1/-3 (ZN UCTION FACILITY	РН	08.04.07
С	-1/-3 LO	NGER FOR FIT	W/WASHER	CP	05.09.09
В	UPDATE	DIAMETER, T	HREAD CLASS ADDED	CP	05.06.17
Α	NEW IS:	SUE		CP	05.03.16
REV.			DESCRIPTION	BY	DATE
DESIG	٧	141	DART AEROSPAC	E USA	.INC.
DRAW	4	Pet	PORT HADLOCI		,
CHECK	ED	L. /	DRAWING NO.		REV. E
MFG. A	PPR.	4.01	D3407		SHEET 1 OF 5
APPRO	VED	111	TITLE		SCALE
DE APP	PR.	-#	TOW RING		NTS
DATE	08.0	7.23	COPYRIGHT © 2005 BY DART AS THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIAND TO BE USED FOR ANY PURPOSE OR COMMUNICATION OF THE WASTITEY PERMISSION FROM DART ASS	ED ON THE EXPRES	S CONDITION THAT IT IS

NOTES:
1) MATERIAL: N/A
2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3 (EXCEPT THREADS)
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: N/A
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3407-XXX" USING BLACK FINE POINT PERMANENT INK MARKER
7) WEIGHT: D3407-041 - 0.60 lbs, D3407-043 - 0.53 lbs, D3407-045 - 0.61 lbs
8) WELD PER DART QSI 004 ON ALL EDGES BETWEEN STEM AND RING

D

С







